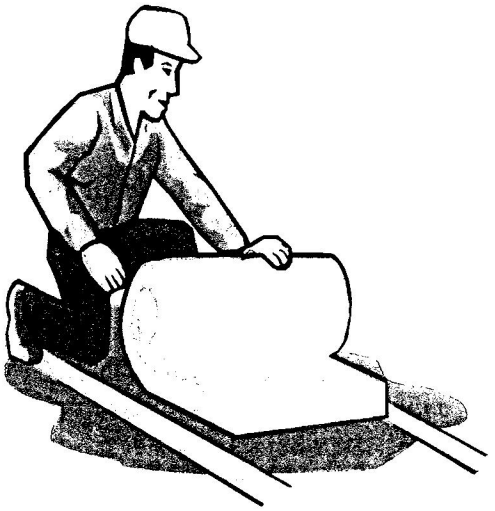
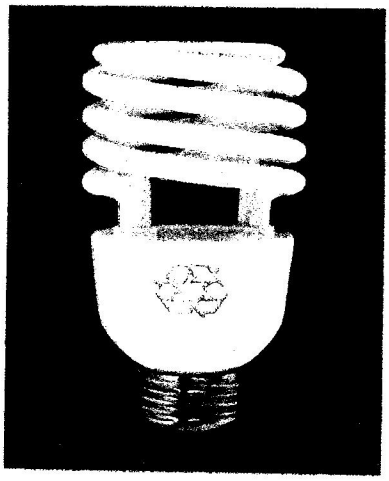
2012 INDIANA ENERGY CONSERVATION CODE

Effective April 5, 2012





These regulations apply to all new construction and additions to existing homes

- **Insulation** (N1102.1)

  Ceilings – R-38

  Attic Access Opening – When the attic access opens from a conditioned space to an unconditioned space, the access panel shall be insulated to the same R-value as the ceiling and be weatherstripped.

  Walls – R-20 insulation material in 2 x 6 stud cavities (R-19 Batts not acceptable).

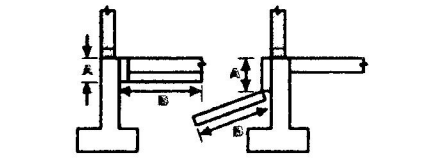
  R-13 insulation material in 2 x 4 stud cavities and R-5 continuous insulated sheathing installed on exterior of wall. Insulated sheathing shall have all joints sealed by approved tape or other method. Insulated sheathing may be omitted over structural bracing panels when bracing panels do not cover more than 25% of total wall area.

  Basement walls – R-10/13 (The 1st R value applies to continuous insulation, the 2nd R value applies to framing cavity insulation).

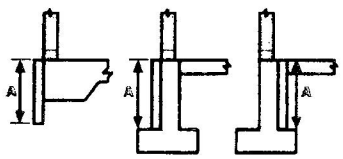
  Floors – R-30 or insulation sufficient to fill framing cavity, installed tight against the floor decking material, R-19 minimum.

  Mass Wall – R-13/R17 (The 2nd R value applies when more than ½ the insulation is on the interior) Mass walls are above-grade walls of concrete block, concrete, insulated concrete form (ICF), masonry cavity, brick(other than brick veneer), earth, and solid timber/logs.

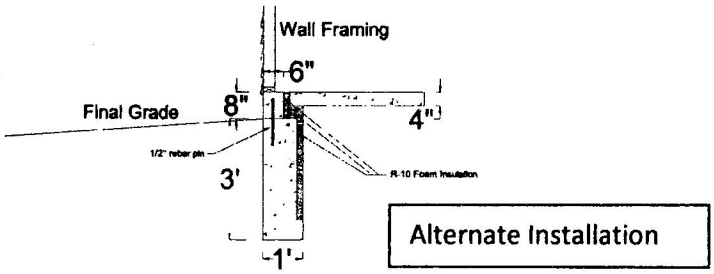
  Slab – R-10 from top of slab down to the foundation on the inside or outside of the foundation wall or down 2 ft and horizontally in/out 2 ft. Uninsulated heating elements/ducts/piping in or under the slab; add R-5. Exposed foam shall be protected from damage by approved method. Protection of exterior foam shall extend six (6) inches below grade. The top edge of foam may be cut at a 45 degree angle away from the exterior wall.



Horizontal Insulation (A + B = Insulation Depth)



Vertical Insulation (A = Insulation Depth)



Alternate Installation

  Vented Crawlspace – R-30 insulation installed in floor above or insulation sufficient to fill framing cavity; R19 minimum.

  Unvented Crawlspace – Insulate walls downward from the floor to the finished grade and then vertically and/or horizontally for at least an additional 24 inches. A 0.1 perm or less vapor barrier shall be installed with all joints overlapped six (6") inches and sealed or taped. Vapor barrier shall extend at least six (6") inches up the stem wall and be attached to the stem wall.

- **Air Leakage** (N1102.4.1)

  The following shall be caulked, gasketed, weather-stripped or otherwise sealed with an air barrier material, suitable film or solid material.

  1. All joints, seams and penetrations
  2. Site built windows, doors, and skylights
  3. Openings between window and door assemblies and their respective jambs & framing
  4. Utility penetrations
  5. Dropped ceilings or chases adjacent to the thermal envelope
  6. Knee walls
  7. Walls & ceilings separating the garage from conditioned spaces
  8. Behind tubs & showers on exterior walls
  9. Common walls between dwelling units
  10. Attic access openings
  11. Rim joists
  12. Other sources of infiltration

- **Air Sealing & Insulation** (N1104.4.2)

  Building envelope, air tightness & insulation installation shall be demonstrated to comply with either the Testing Option or the Visual Inspection Option using the Code Checklist.

- **Fireplaces** (N1102.4.3)

  New wood burning fireplaces shall have gasketed doors and outside combustion air.

- **Programmable Thermostats** (N1103.1.1)

  Where primary heating system is a forced air furnace, at least one thermostat per dwelling unit shall be capable of controlling the heating & cooling system on a daily schedule to maintain different temperature set points at different times of the day.

- **Ducts** (N1103.2.1)

Supply ducts in attics outside the building envelope shall be insulated to R-8 minimum, other ducts outside of the thermal envelope R-6. Building framing cavities shall not be used as supply ducts.

Duct Sealing (N1103.2.2)

- Ducts, air handlers, filter boxes and building cavities used as ducts shall be sealed. Duct tightness shall be verified by either of the following methods:
  1. Post construction test
  2. Rough-in test

- **Lighting Systems** (N1104)

  50% of permanently installed lighting fixtures must have high efficiency lamps.

- **Building Thermal Envelope Insulation** (N1101.4)

  Each piece of insulation 12 inches or more wide shall bear the R-value mark.

  Without the mark, the insulation installer shall provide a certification listing the type, manufacturer and R value in each element of the building. Also listed on the certification:

  Blown or sprayed insulation initial thickness, settled thickness, settled R-value, installed density, coverage area & number of bags installed.

  Sprayed polyurethane foam (SPF) insulation installed thickness of the covered area and R-value of installed thickness.

  Installer will sign, date, and post the certification in a conspicuous location on the job site.

- **Blown or Sprayed Roof/Ceiling Insulation** (N1101.4.1)

  The thickness shall be written in inches on markers that are installed at least one for every 300 SF throughout the attic space. The markers shall be affixed to the trusses/rafters or joists and show the minimum installed thickness with numbers at least 1" high facing the attic access opening.

  Spray polyurethane foam thickness and installed R-value shall be listed on the certificate.

  For the complete energy Chapter 11 out of the Indiana Residential Code, go to:

  http://www.in.gov/legislative/iac/T06750/A00140.PDF , scroll down to page 101 (Note: the old Chapter 11 is just before this section)

Sample sign off sheet to be attached at the electrical service panel.

ENERGY COMPLIANCE CERTIFICATE

Project Name: _____

Address:

_____

Permit Number: _____

Builder: _____

INSULATION RATINGS (list R-Value of predominant area of component	**Enter R-Value or N/A (does not apply)**
Ceiling / Roof	
Ducts in Attic	
Ducts in unconditioned space	
Floor, Cavity	
Floor, underslab	
Slab edge (indicate heated slab? Y / N)	
Wall (cavity or cavity / continuous)	
FENESTRATION (Glazing)	
Predominant value of fenestration	ENTER U-VALUE
EQUIPMENT EFFECIENCIES	**AFUE or EER or N/A (does not apply)**
Heating	
Cooling	
Service water heating	
OTHER HEATING EQUIPMENT	
Gas-fired unvented room heater(s)	YES ☐ NO ☐
Electric furnace	YES ☐ NO ☐
Baseboard electric heater(s)	YES ☐ NO ☐
COMPLIANCE METHOD	**Check (X) compliance method**
Prescriptive (Table 1102.1)	
AU Trade off / Total UA Trade off (circle method)	
Performance (tool used)	
Name of person completing certificate: Printed Name:	Title:
Signature:	Date: / /